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BIBLIOGRAPHY OF NACA REPORTS RELATED TO
AIRCRAFT CONTROL AND GUIDANCE SYSTEMS

JANUARY 1949 - APRIL 1954

By Roy J. Niewald and Jack D. Brewer

NACA Headquarters
Washington, D. C.

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NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

RESEARCH MEMORANDUM

BIBLIOGRAPHY OF NACA REPORTS RELATED TO AIRCRAFT

CONTROL AND GUIDANCE SYSTEMS

January 1949 - April 1954

By Roy J. Niewald and Jack D. Brewer

FOREWORD

This bibliography of NACA reports relating to aircraft control and guidance systems has been prepared as a means of assisting in the codification and dissemination of technical information in this important and rapidly expanding field. The need for a bibliography of this nature has been expressed by representatives of the aircraft industry concerned with control system design, in particular those who are members of the NACA Subcommittee on Stability and Control.

This report lists pertinent NACA papers presenting research results which have a direct bearing on control system design and performance for both piloted and automatically controlled aircraft. Limited reference is also made to NACA reports on aircraft engine controls and to research techniques and instrumentation pertinent to the study of control systems and aircraft dynamics in flight. Reports published between January, 1949, and April, 1954, are listed in chronological order and cross referenced where appropriate according to the subject headings given in the Index on the following page.

It may be noted that NACA reports concerned with purely aerodynamic aspects of control system design, such as control effectiveness and hinge moments, damping derivatives of wings and bodies, etc., are not included in this bibliography. However, two NACA reports summarizing recent information on controls may be of interest in this regard. These reports are RM L53117a, entitled "Recent Information on Flap and Tip Controls," by Douglas R. Lord and K. R. Czarnecki, and RM L53124a, entitled "Data on Spoiler-type Ailerons," by John G. Lowry.

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AIRPLANE FLIGHT CONTROL



Manual Flight Control Systems

Control boost, artificial feel, limiting

Phillips, William H.: Theoretical Analysis of Some Simple Types of Acceleration Restrictors. NACA TN 2574, 1951.

Mathews, Charles W., Talmage, Donald B., and Whitten, James B.: Effects on Longitudinal Stability and Control Characteristics of a Boeing B-29 Airplane of Variations in Stick-Force and Control-Rate Characteristics Obtained Through Use of a Booster in the Elevator-Control System. NACA Report 1076, 1952.

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